



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/911,670

07/24/2001

Bruce A. Willins

6000.001500/1122

3824

23720

7590

07/13/2005

WILLIAMS, MORGAN & AMERSON, P.C.
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER

NGUYEN, TOAN D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,670

Applicant(s)

WILLINS ET AL.

Examiner

Toan D. Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 2-7, 9-11 and 18-20 are objected to because of the following informalities:

In claim 2 line 1, it is suggested to change "A method" to --- The method ---.

Similar problems exist in claim 3 line 1, claim 4 line 1, claim 5 line 1, claim 6 line 1, claim 7 line 1, claim 18 line 1, and claim 19 line 1.

In claim 2, it is suggested to change "conducting management communications" to --- said conducting management communications ---. Similar problem exist in claim 18 line 1.

In claim 9 line 1, it is suggested to change "An access" to --- The access ---. Similar problems exist in claim 10 line 1, claim 11 line 1 and claim 20 line 1.

In claim 19 line 2, it is suggested to change "second wireless data communications protocol" to --- second wireless communications protocol ---.

Similar problem exist in claim 20 line 2.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15 line 1, recites the limitation "the control unit" lack clear antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 5, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al (US 6,326,926) in view of Berliner et al (US 6,731,908).

For claims 1-2, 18 and 19, Shoobridge et al disclose in a system for providing wireless data communication using a first protocol (figure 3, col. 7 lines 1-3), said system having access points (figure 1, references 24, col. 5 line 7) for conducting wireless data communications with mobile units (figure 1, reference 36, col. 5 line 34) using said first protocol (figure 3, col. 7 lines 1-3), a method for conducting communications with an access point (figure 2, reference 54, col. 6 line 5) comprising providing said access point (figure 2, reference 54) with operating according to a

second wireless data communications protocol (figure 2, col. 5 lines 64-65), and conducting communications with said access point (figure 3, reference 54b) using said second wireless data communications protocol (figure 3, col. 6 lines 65-66).

Shoobridge et al do not expressly disclose conducting out of band management communications. In an analogous art, Berliner et al disclose conducting out of band management communications (figure 3B, col. 8 lines 50-65, base station 100 conducting out of band management communication means). Berliner et al disclose a radio module (figure 313, reference 103-2, col. 8 lines 62-65). Berliner et al disclose further conducting management communications comprises at least one of configuring one or more resources of said access point and adjusting one or more parameters of said access point (col. 8 lines 32-43 as set forth in claim 2); wherein conducting management communications comprises at least one of updating system information of said access point, modifying system programming of said access point, and modifying communications parameters of said access point (col. 8 lines 32-43 as set forth in claim 18); monitoring the data communications using said second wireless data communications protocol (figure 3B, reference 103-2, col. 8 lines 54-65 as set forth in claim 19).

One skilled in the art would have recognized conducting out of band management communications to use the teachings of Berliner et al in the system of Shoobridge et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the conducting out of band management communications as taught by Berliner et al in Shoobridge et al's system with the

motivation being to provide RF transceiver 103-1 may handle telephone communications and RF transceiver 103-2 may handle distance measurement RF transmissions (col. 8 lines 61-65).

For claim 3, Shoobridge et al disclose wherein said first protocol is 802.11 Protocol (col. 7 lines 1-3) and said second wireless communications protocol is Bluetooth (col. 6 lines 65-66).

For claim 5, Shoobridge et al disclose wherein said second wireless communications protocol is Bluetooth (col. 6 lines 65-66).

6. Claims 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al (US 6,326,926) in view of Berliner et al (US 6,731,908) further in view of Niimi et al (US 5,996,028).

For claims 4 and 7, Shoobridge et al in view of Berliner et al do not disclose wherein said conducting management communications includes authenticating said communications. In an analogous art, Niimi et al disclose wherein said conducting management communications includes authenticating said communications (col. 1 lines 29-32). Niimi et al disclose wherein said conducting management communications includes authenticating said communications (col. 1 lines 29-32 as set forth in claim 7).

One skilled in the art would have recognized wherein said conducting management communications includes authenticating said communications to use the teachings of Niimi et al in the system of Shoobridge et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the wherein said conducting management communications includes authenticating said

communications as taught by Niimi et al in Shoobridge et al's system with the motivation being to provide radio communication apparatus have detachable memories in which private information is stored (col. 1 lines 26-27).

For claim 6, Berliner et al in view of Shoobridge et al and Naeini et al and Niimi et al disclose wherein said conducting management communications includes associating said radio module as a slave unit (col. 8 lines 61-65).

7. Claims 8-10, 12-14, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berliner et al (US 6,731,908).

For claim 8, Berliner et al disclose distance measurement using half-duplex RF techniques, comprising:

- a first interface (figure 3B, reference 101) for conducting data communications with one or more computers (col. 8 lines 1-5);

- a first radio module (figure 3B, reference 103-1) using a first protocol for transmitting wireless data messages received at said first interface and for receiving and relaying data messages via said first interface (col. 8 lines 14-15 and col. 8 lines 52-54);

- at least one processor (figure 3B, reference 102) connected to said first interface (figure 3B, reference 101) and said radio module (figure 3B, reference 103-1) for controlling said access point (figure 3B, reference 100) (col. 8 lines 8-9 and col. 8 lines 57-59); and

a second radio module (figure 3B, reference 103-2) operating using a second wireless communications protocol, different from said first protocol (figure 3B, reference 102) (col. 8 lines 57-59 and col. 8 lines 62-65).

However, Berliner et al do not expressly disclose providing wireless management communications. To include providing wireless management communications would have been obvious to one of ordinary skill in the art because Berliner et al disclose at col. 8 lines 38-43, that "the base station may transmit and receive communications signals with a cellular station, a satellite, or other network switching infrastructure. In addition, the processor 102 and transceiver 103 may be used to handle other communications protocol(s), such as Bluetooth, for example."

For claim 9, Berliner et al disclose wherein said second radio module is arranged to operate as a slave module using a master slave protocol (col. 8 lines 61-65).

For claim 10, Berliner et al disclose wherein said second radio module is arranged to operate as a slave module using the Bluetooth protocol (col. 8 lines 61-65).

For claim 12, Berliner et al disclose distance measurement using half-duplex RF techniques, comprising:

an interface (figure 3B, reference 101); and

a processor (figure 3B, reference 102) communicatively coupled to the interface (figure 3B, reference 101), the processor adapted to:

allow data communications with one or more remote devices over a first communications protocol (figure 3B, reference 103-1, col. 8 lines 52-54); and

allow access to over a second communications protocol, wherein the second communications protocol is a wireless protocol and is different from the first communications protocol (figure 3B, reference 103-2, col. 8 lines 54-65).

However, Berliner et al do not expressly disclose one or more management features of the apparatus. To include one or more management features of the apparatus would have been obvious to one of ordinary skill in the art because Berliner et al disclose at col. 8 lines 38-43, that "the base station may transmit and receive communications signals with a cellular station, a satellite, or other network switching infrastructure. In addition, the processor 102 and transceiver 103 may be used to handle other communications protocol(s), such as Bluetooth, for example."

For claim 13, Berliner et al disclose wherein the processor is adapted to allow the data communications through a first radio module (figure 3B, reference 103-1, col. 8 lines 52-54) and to allow to the management features through a second radio module (figure 3B, reference 103-2, col. 8 lines 54-65).

For claim 14, Berliner et al disclose wherein said second radio module operated as a slave unit during a portion of the time the access to the management features is allowed (col. 8 lines 61-65).

For claim 17, Berliner et al disclose wherein the processor is further adapted to allow monitoring of the data communications over the second communications protocol (figure 3B, reference 103-2, col. 8 lines 54-65).

For claim 20, Berliner et al disclose wherein the processor is further allows monitoring the data communications using said second wireless data communications protocol (figure 3B, reference 103-2, col. 8 lines 54-65).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berliner et al (US 6,731,908) in view of Smeets (US 6,633,979).

For claim 11, Berliner et al do not disclose wherein said processor is further arranged to authenticate communications via said second radio module. In an analogous art, Smeets discloses wherein said processor is further arranged to authenticate communications via said second radio module (col. 5 lines 6-10).

One skilled in the art would have recognized wherein said processor is further arranged to authenticate communications via said second radio module to use the teachings of Smeets in the system of Berliner et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the wherein said processor is further arranged to authenticate communications via said second radio module as taught by Smeets in Berliner et al's system with the motivation being to produce a COF 50 value that each of the nodes remembers (col. 5 line 1-3).

9. Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Berliner et al (US 6,731,908) in view of Niimi et al (US 5,996,028).

As far as understood, with respect to claim 15, Berliner et al do not disclose wherein the control unit is further adapted to authenticate communications associated with the access of the management features. In an analogous art, Niimi et al disclose

Art Unit: 2665

wherein the control unit is further adapted to authenticate communications associated with the access of the management features (col. 1 lines 29-32).

One skilled in the art would have recognized wherein the control unit is further adapted to authenticate communications associated with the access of the management features to use the teachings of Niimi et al in the system of Berliner et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the wherein the control unit is further adapted to authenticate communications associated with the access of the management features as taught by Niimi et al in Berliner et al's system with the motivation being to provide radio communication apparatus have detachable memories in which private information is stored (col. 1 lines 26-27).

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berliner et al (US 6,731,908) in view of Shoobridge et al (US 6,326,926).

For claim 16, Berliner et al do not expressly disclose wherein the first protocol is 802.11 protocol and the second wireless communications protocol is Bluetooth protocol. In an analogous art, Shoobridge et al disclose wherein the first protocol is 802.11 protocol (col. 7 lines 1-3) and the second wireless communications protocol is Bluetooth protocol (col. 6 lines 65-66).

One skilled in the art would have recognized the first protocol is 802.11 protocol and the second wireless communications protocol is Bluetooth protocol, and would have applied Shoobridge et al's employing the IEEE 802.11 standard and the Bluetooth standard in Berliner et al's base station. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention, to use Shoobridge et al's method of operating a wireless and a short-range wireless connection in the same frequency in Berliner et al's distance measurement using half-duplex RF techniques with the motivation being to employ the IEEE 802.11 standard and the Bluetooth standard (col. 6 lines 60-61).

Response to Arguments

11. Applicant's arguments filed on 03/09/05 have been fully considered but they are not persuasive.

The applicant argues with respect to claims 1, 8 and 12, that none of the cited references, when considered alone or in combination, teach at least the claimed feature of conducting management communications with the access point using the second wireless communication protocol and a processor that is adapted to allow data communications with one or more remote devices over a first communications protocol and further adapted to allow access to one or more management features of the apparatus over a second communications protocol, wherein the second communications protocol is a wireless protocol and is different from the first communication protocol. The examiner disagrees. Shoobridge et al clearly teach a system for providing wireless communication using a first protocol, a cellular communication system 20 employing the IEEE 802.11 standard (figure 1, col. 4 lines 66-67) and a second protocol, a cellular communication system 50 employing the Bluetooth standard (figure 2, col. 5 lines 64-65). Applicant's attention is directed to Berliner et al patent at col. 7 lines 22-30 (figure 2) where Berliner et al clearly teach "For

example, if the base station 100 is a Bluetooth enabled mobile telephone, the base station 100 require RF communications for mobile telecommunications, distance measurement, and Bluetooth communications. The same or different control and/or RF equipment may be used for wireless communications to network infrastructure (e.g., mobile telephone to cellular base station)". Berliner et al further teach at col. 8 lines 38-43 and col. 8 lines 61-65 (figure 3A-B) "For example, the base station may transmit and receive communications signals with a cellular station, a satellite, or other network switching infrastructure. In addition, the processor 102 and transceiver 103 may be used to handle other communications protocol(s), such as Bluetooth, for example." (conducting management communications with the access point using the second wireless communication protocols means).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

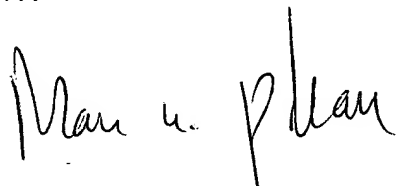
Art Unit: 2665

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
TN



MAN U. PHAN
PRIMARY EXAMINER